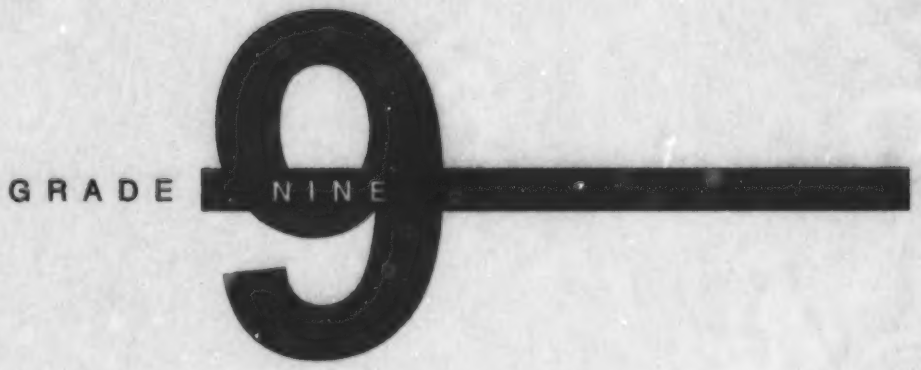
Curriculum Handbook *for* **Parents**

2001–2002

Catholic School Version



Alberta
LEARNING

This document, along with most Alberta Learning documents, can be found on the web site at **<http://www.learning.gov.ab.ca>**.

The parent document titles referenced in this handbook may be purchased from:

Learning Resources Centre
12360 – 142 Street
Edmonton, Alberta, Canada, T5L 4X9
Telephone: 780–427–5775
Fax: 780–422–9750
Internet: <http://www.lrc.learning.gov.ab.ca>

Telephone numbers of branches referred to in this handbook can be reached, toll free, inside Alberta, by dialing 310–0000.

Curriculum Branch
Telephone: 780–427–2984
Fax: 780–422–3745
Email: <curric.contact@learning.gov.ab.ca>

French Language Services Branch
Telephone: 780–427–2940
Fax: 780–422–1947
Email: <LSB@learning.gov.ab.ca>

Special Programs Branch
Telephone: 780–422–6326
Fax: 780–422–2039
Email: <SpecialEd@learning.gov.ab.ca>

Learner Assessment Branch
Telephone: 780–427–0010
Fax: 780–422–4200
Email: <assess.contact@learning.gov.ab.ca>

ISSN 1483–1783

Copyright © 2001, the Crown in Right of Alberta, as represented by the Minister of Learning. Alberta Learning, 11160 Jasper Avenue, Edmonton, Alberta, Canada, T5K 0L2. Additional copies may be purchased from the Learning Resources Centre, 12360 – 142 Street, Edmonton, Alberta, Canada, T5L 4X9, telephone 780–427–5775; or, from one of the Queen's Printer Bookstores, telephone 780–427–4952, Edmonton; or, telephone 403–297–6251, Calgary. Inside Alberta, dial 310–0000 to be connected toll free.

Permission is given by the copyright owner to reproduce this handbook for educational purposes and on a nonprofit basis.

Curriculum Handbook *for* **Parents**

2001–2002

Catholic School Version

GRADE **9**

Table of
Contents

Message from the Minister of Learning ..... *iii*
Letter from Archbishop Collins ..... *iv*
Introduction to the Grade 9 Handbook ..... *v*
Introduction to the Junior High School Curriculum *1*
What Is Curriculum? *2*
- Achievement Tests *2*
- Special Needs *3*
- English as a Second Language *3*
- Personal and Career Development *3*

Religious Education *4*
English Language Arts *8*
Mathematics *10*
Science *15*
Social Studies *17*
Physical Education *19*
Health and Personal Life Skills *22*
Information and Communication Technology *24*
Integrated Occupational Program *25*
Optional Courses *26*
- Career and Technology Studies *26*
- Fine and Performing Arts *27*
- Language Programs and Courses Other Than English *28*
- Other *36*

Feedback *37*

©Alberta Learning, Alberta, Canada

Message from the
Minister of Learning

Alberta offers more schooling options than ever before. The opportunity for choice reflects our commitment to quality education—the solid foundation every child needs to learn, grow and succeed.

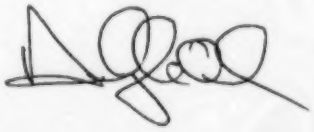
While students are at the centre of the education system, parents are vital partners. Your involvement in your child's education is critical to his or her success. To help your child succeed—you need to know what is being taught. This handbook is developed to provide you with that information. As well, I encourage you to continue working closely with your child's teacher who can provide you with invaluable information and guidance.

The *Curriculum Handbook for Parents* series is your guide to each stage of learning. It is an outline of what we expect our students to know at each grade level of their education. When you know what is expected at school, you can provide the home support your children need. By reading about what they are learning at school and discussing it at home, you are sending a very important message to your child—that you value education.

Alberta Learning revises curriculum in the core subject areas every eight to ten years. This ensures that course content remains current and relevant, and meets the needs of students preparing for their futures.

Education is a fundamental part of the Alberta Advantage, and government's goal is for Alberta to have the best-educated students in the world. We can accomplish this only one way—by working *together.* We are all partners in education—parents, teachers, trustees, administrators, community members—and we must work to address issues and help ensure Alberta students acquire the knowledge and skills they need for a successful future.

Our children are our future, and our most important investment.



Dr. Lyle Oberg
M.L.A. Strathmore-Brooks
Minister of Learning

©Alberta Learning, Alberta, Canada

Dear Parents and Guardians:

On behalf of the Catholic Bishops of Alberta, I welcome this opportunity to affirm you in your role as parents in the education of your children and wish to express my appreciation to the Government of Alberta and Alberta Learning for this 'Curriculum Handbook for Parents'.

The Church has always recognized with confidence that you, parents, are the first and primary educators of your children, especially with regards to education in the faith. This is a noble, yet, challenging calling that is rightfully yours. Today, therefore, because of the many diverse pressures and influences on our children, your role is vital in working with our schools to continue to provide the best possible education for our children. To those of you who have entrusted your children to a Catholic school be assured that it is with great respect for these facts that we support you in your role. I encourage you to work closely with our Catholic schools by joining your local school councils or parent groups. Be a strong voice for the catholic identity of schools. In this regard, you will share in a concrete and invaluable way in the central mission of the Church which is to proclaim Jesus and his Gospel in the world today and, in so doing, hand on our faith to our children.

I commend Alberta Learning for providing parents with this practical Curriculum Handbook. It is a clear presentation of what parents can expect of our Alberta schools, Public and Catholic, and by its very existence also acknowledges how important you are as parents in your children's education. In it, you will find a comprehensive presentation of the content and expectations of the Religious Education Program approved by the Canadian Conference of Catholic Bishops. It reflects the essential character of Catholic schools as communities of learning.

+ Thomas Collins

Thomas Collins
Archbishop of Edmonton
President, Alberta Conference of Catholic Bishops

8421 - 101 Avenue, Edmonton, Alberta T6A 0L1 ♦ Tel.: (780) 469-1010 ♦ Fax: (780) 465-3003

©Alberta Learning, Alberta, Canada

Introduction to the Grade 9 Handbook

This handbook provides parents with information about the Grade 9 curriculum—the knowledge, skills and attitudes students in Alberta are expected to demonstrate when they have completed the Grade 9 curriculum. It is based on the Alberta Learning *Program of Studies: Junior High Schools*. The handbook includes samples of what students are expected to learn in each subject. The complete curriculum for Grade 9 is available in all Alberta junior high schools.

©Alberta Learning, Alberta, Canada

©Alberta Learning, Alberta, Canada

102-02044/

Introduction

TO THE JUNIOR HIGH SCHOOL CURRICULUM

Alberta Learning specifies what all students are expected to learn and be able to do. The curriculum is organized into separate subjects or course areas and is designed to enable teachers to make connections across subjects, and to develop programming that accommodates a range of student needs. We expect that teaching methods and schedules will vary from school to school and from class to class to meet the diverse learning needs of students.

©Alberta Learning, Alberta, Canada

What Is Curriculum?

Curriculum describes what students are expected to learn. In Alberta, curriculum is developed by Alberta Learning and is described in documents called programs of study for elementary, junior high and senior high schools.

The curriculum specifies what all students in the province are expected to learn in each subject area at each grade level. It is developed by Alberta Learning in consultation with teachers, administrators, parents, representatives from post-secondary institutions, and professional and community groups.

Within the context of Catholic schools, the curriculum in all of its aspects—content, the teaching process, and the total school environment—reflect the values of faith, hope, charity, forgiveness and justice as found in the gospels and the message of Jesus Christ as understood by the Catholic Church.

Teachers are responsible for using the curriculum to plan their teaching activities and set appropriate levels of challenge according to students' learning needs and abilities. Teachers regularly assess student progress and report to parents, students and school administrators.

A document entitled *The Parent Advantage* provides tips and strategies to assist parents in helping their children at home with their school work. This resource is available for purchase from the Learning Resources Centre.

In Catholic schools, there are many opportunities for integrating gospel values and nurturing the presence of God in our midst within the curriculum. Teachers will determine where religious education and church teaching can be integrated with other subjects.

Achievement Tests

As well as being assessed by their teachers, students write provincial achievement tests in grades 3, 6 and 9. Grade 3 students write achievement tests in language arts and mathematics. Grades 6 and 9 students write achievement tests in language arts, social studies, mathematics and science. Students in French programs write English and French language arts at grades 6 and 9, and the French forms of the other subject area achievement tests. Grade 3 students in French programs write the French form of the mathematics achievement test. The results of these achievement tests are provided to school boards and schools. Parents may ask for their child's test results at their local school.

Information about provincial achievement testing in grades 3, 6 and 9 is provided in Alberta Learning publications called *Parent Guide to Provincial Achievement Testing* and *Guide des parents Programme des tests de rendement provinciaux*. Individual guides for Grade 3 and for Grade 6 are available in elementary schools. The Grade 9 guide is available in junior high schools. The publications also may be obtained from Alberta Learning's Learner Assessment Branch.

©Alberta Learning, Alberta, Canada

Special Needs

School boards are required to provide each resident student with an education program, including access to special education programs. If you think that your child may have special needs, talk to your child's teacher. *Partners During Changing Times* is an information booklet for parents of children with special needs. It provides a general overview of how you can be involved in the education of your children. This document is available on the Alberta Learning web site or by contacting the Special Programs Branch, Edmonton. An additional resource, *The Parent Advantage*, provides tips and strategies to assist parents in helping their children at home with their schoolwork. This resource is available for purchase from the Learning Resources Centre. As well, *A Handbook for Aboriginal Parents of Children with Special Needs* provides information to assist Aboriginal parents in working with schools to meet the special needs of their children. This resource is also available for purchase from the Learning Resources Centre.

English as a Second Language

Many children born in Canada have a first language other than English, and many students move here from non-English speaking countries. Schools provide additional assistance for English as a Second Language (ESL) students in grades 1 to 12. This helps them acquire sufficient fluency in English so they can integrate into the regular classroom as quickly as possible. If you think your child may have ESL needs, talk to your child's teacher.

Personal and Career Development

Preparing for life and work is a complex process that begins in the early years of schooling and continues throughout our lives. Alberta schools are taking an active role—along with parents and the community—in helping students move successfully from basic education to further studies and the workplace.

In junior high school, students begin linking their personal aptitudes and goals to possible future careers. They continue to develop life skills, including such employability skills as cooperating with others and being reliable. At this stage, students begin to outline their own learning and career goals.

Personal and career development activities and outcomes are integrated into all junior high school courses and programs. The following junior high programs focus specifically on these topics: Health and Personal Life Skills 7–9, Physical Education 7–9, Career and Technology Studies (CTS) and work study. Many junior high schools organize special career development activities, such as mentoring, job shadowing, portfolios and annual career fairs. Students may be asked to complete a learning/career plan to help them select courses related to their interests and possible career opportunities.

©Alberta Learning, Alberta, Canada

Religious Education

Religious education is an essential and integral part of the life and culture of a Catholic school. Through it, students are invited to develop the knowledge, beliefs, skills, values and attitudes needed to build a relationship with God and community through the person of Jesus Christ. Religious education shares the same goals and objectives set forth for all good education, that is, the growth and development of the whole person in all his or her dimensions—physical, intellectual, emotional, social and spiritual.

Religious education has four essential characteristics.

It is **Trinitarian**. It recognizes God as the creator of all things who gives us Jesus. It is Jesus who reveals God to us, and in turn reveals God's Spirit, through whom we understand our faith.

It is based on **Sacred Scripture** through which we hear the mystery of God revealed, the call to be in relationship with God and each other, and we learn how to pray.

It is based on the **life experience** of the students through which they are invited to discern signs of God in their daily lives.

It is presented within the tradition of the **Catholic faith community** which, based on Church teachings, sacramental and liturgical life, provides students with experiences of faith, prayer, love and justice.

With an awareness of the uniqueness of each student and a recognition that religious development takes place through a process of stages and within a community, it is expected that program presentation will vary from place to place to meet the diverse learning and religious formation needs of all students.

Religious Education Programs for elementary and junior high schools are authorized by the Bishop of the local diocese. Some school districts have developed supplementary resources and adapted the program to better meet local needs.

The Grade 9 program assists young people in understanding both the joy and the demands of following in the way of Christ and living out the faith that our community professes in the Creed. Using the Beatitudes as a touchstone, young people are invited to examine the attitudes and actions that characterize the Christian life. They are encouraged to understand and nurture within themselves the virtues which will enable them to deepen their relationship with God in and through Christ in the context of a spirit-filled community.

Students explore these themes through the study of ten units:

Unit 1

Be with Me.

The students will examine the qualities of relationships. They will identify ways that the Beatitudes help us to understand the distinctive Christian attitudes that shape wholesome relationships. The Ten Commandments and Beatitudes are seen as stepping stones that show the way to true happiness and friendship with God and others.

©Alberta Learning, Alberta, Canada

Unit 2 — **Be Alive.**

The students are invited to deepen their appreciation for the gift of life, and as they become increasingly aware of their gifts and abilities through the mystery of the Incarnation. Jesus affirms the dignity of every person and the sacredness of the human body. The 5th Commandment underlines the sacredness of human life from the moment of conception to the moment of death. Emotions are a gift that help us to relate to God and others. Our faith guides our expression of emotion so that we relate to others in a responsible and loving way. "Blessed are the peacemakers."

Unit 3 — **Be Faithful.**

The students are introduced to the virtue of faithfulness as an attitude that encourages them to involve God in their lives. The 1st and 2nd Commandments are seen as a call to love and respect God above everything. The students will deepen their understanding of prayer as a lived relationship with God, and the 3rd Commandment as a call to "stop and pray." They will describe and demonstrate a variety of forms of prayer and articulate the different ways God responds to prayer. "Blessed are the poor in spirit."

Unit 4 — **Be Loving.**

The students will explore the Christian dimensions of love within the context of popular notions of love. They will analyze ways they love others and articulate what it means to be loved and to love unconditionally. They will review and apply a decision making model, define conscience, and name its role in moral decision making. Within the context of the 6th Commandment as a protection for the sacred bonds of committed love, the students will explain how sexuality helps them to love, identify acceptable Christian expressions of love, and analyze sexual issues in relation to the virtue of chastity. They will identify signs of manipulative, coercive and abusive behaviours in relationships and demonstrate an understanding of the assertiveness skills necessary for developing and maintaining healthy relationships. "Blessed are the peacemakers."

Unit 5 — **Be Obedient.**

The students will explain and interpret the 4th Commandment as it applies to families and identify the roles, duties and responsibilities that are shared within Christian families. They will recognize legitimate authority within various sectors of society: school, civic community, Church, and identify, explain and affirm their respective duties.

Unit 6 — **Be Just.**

The students will identify social justice issues and use the preferential option for the poor as the criterion for analyzing issues of injustice. They will demonstrate an understanding that Christian justice is rooted in love, mercy and compassion. Blessed are those who hunger and thirst for righteousness. The students will also evaluate their lifestyle in terms of its ecological impact and identify the correlation between their relationship with God and their relationship with others and the earth. "Blessed are the meek."

©Alberta Learning, Alberta, Canada

Unit 7 — **Be Honest.**

The students will define stewardship in terms of respect for the goods and property of another. They will identify the balance between the right to own and the requirement to share. The students will explain the role of truthfulness in relationships and recognize God as the source of absolute truth and they will evaluate their own behaviour in light of the 7th and 8th Commandments.

Unit 8 — **Be Generous.**

The students will understand how Jesus models a generous attitude toward others and enables us to rejoice in our own and in other's good fortune, happiness and blessing. They will define pure of heart, modesty and envy, comparing and contrasting common attitudes in society with the 9th and 10th Commandments. These commandments will be used as a tool for critical reflection on career and life skills planning. "Blessed are the pure of heart."

Unit 9 — **Be Forgiving.**

The students will define forgiveness, examine the ways Jesus models forgiveness, and identify areas in their life where they are called to forgive. They will understand reconciliation, give examples of how it restores and heals relationships, and explain how the Church enables and facilitates reconciliation. "Blessed are the merciful."

Unit 10 — **Be Hopeful.**

The students will understand hope and its role in Christian living and explore the ways that prayer nourishes hope. They will identify people who model Christian hope and examine the 1st Commandment as a call to place all our hope in God. A review of the Virtues and Beatitudes which underlie the Christian lifestyle will culminate in a celebration of faith. "Blessed are you when people revile you and persecute you on my account. Rejoice and be glad, for your reward is great in heaven."

As a result of participation in this program, students will:

- demonstrate a familiarity with and an ability to retell key biblical narratives that illustrate God's faithful relationship with a chosen people and the community's response to this relationship
- express connections between the relationships described in biblical events and their own life experiences
- show reverence for Scripture as God's living Word
- define human dignity and express its significance in Christian faith and practice
- name the articles of the Apostles' Creed as a summary expression of the Christian community's relationship with God and articulate some of the meaning of each article
- communicate their faith in ways that show a genuine understanding of the Apostles' Creed
- describe how the Creed is a summary of the faith community's understanding of who God is

©Alberta Learning, Alberta, Canada

- explain how the Creed calls them to make responsible choices and decisions in their everyday lives
- analyze (critique) events and personal decisions in light of a commitment to follow Jesus
- describe the relationship between real-life situations and the baptismal commitment to follow Jesus in the community of the Holy Spirit
- outline the ways that prayer deepens a relationship with God
- pray, using a variety of prayer styles
- participate in traditional forms of Catholic prayer.

The school, through the Religious Education Program, complements parents in their role as primary and principal educators of their children. Home and family play a vitally important role in the faith development of children. Within the family, seeds of faith are planted. Family relationships and daily experiences are major factors in shaping a child's values, attitudes and Catholic identity. Regular religious practice and the application of classroom learning to daily life are critical parts of religious formation.

Prayer is an integral part of the Religious Education Program and of each school day since intimacy with God is the ultimate goal of Catechesis. Respecting the individual differences of children and our changing human needs, prayer is experienced in many different ways: silent reflection, guided imagery, scriptural prayer, song and formal community prayer. As we enter into prayer, we give praise and thanks for God's loving presence and call upon the Spirit to guide, nourish and empower our lives through Jesus Christ.

Teaching the sacraments occurs within each of the Religious Education Programs. Sacraments celebrate the presence of Christ in our lives. They are effective signs that make God's grace present to us in love, healing and the transformation of our lives. Eucharist and Reconciliation are an essential part of each child's religious formation and a necessary grounding for a mature faith. As with many basic themes, Eucharist and Reconciliation are introduced in Grade 1, but continue to be deepened and intensified in each year thereafter. Children who have not yet celebrated First Communion or First Reconciliation are always welcome to contact their parish to begin their immediate preparation for the sacraments.

The Religious Education Program interprets for the students what the Catechism of the Catholic Church teaches about our faith in a manner appropriate to the age and development of the students. Not everything in the Catechism is incorporated because, as the Catechism itself points out, what is taught must be adapted to the "differences of culture, age, spiritual maturity, and social and ecclesial conditions among all those to whom it is addressed" (#24). Specific excerpts are quoted at the end of each theme for the teacher to help root the contents and activities of the theme in Church tradition.

The Religious Education Program is structured around the church liturgical year. This enables students to live and express faith in an integrated way at school, at home and in the parish community.

©Alberta Learning, Alberta, Canada

English Language Arts

Language is the basis of all communication. Language learning is an active process that begins at birth and continues throughout life. Children learn language as they use it to communicate their thoughts, feelings and experiences; establish relationships with family members and friends; and strive to make sense and order of their world. Responsibility for language learning is shared by students, parents, teachers and the community.

The aim of English language arts is to enable each student to understand and appreciate language, and to use it confidently and competently in a variety of situations for communication, personal satisfaction and learning.

In a Catholic school, students are invited to consider how the knowledge, skills and values studied within the language arts curriculum are integrated with other subject areas, including religious education and reflect the Catholic identity of the school.

By the end of Grade 9, students will listen, speak, read, write, view and represent to:

- ***explore thoughts, ideas, feelings and experiences***

- explore and explain how interactions with others and with oral, print and other media texts affect personal understandings
- extend understanding by taking different points of view when rereading and reflecting on oral, print and other media texts
- develop and extend understanding by expressing and responding to ideas on the same topic, in a variety of forms of oral, print and other media texts

- ***comprehend and respond personally and critically to oral, print and other media texts***

- discuss how interpretations of the same text might vary, according to the prior knowledge and experiences of various readers
- preview complex texts as to their intent, content and structure, and use this information to set a purpose and select strategies for reading
- analyze and discuss how the structural features of informational materials, such as textbooks, bibliographies, databases, catalogues, web sites, commercials and newscasts, enhance the effectiveness and efficiency of communication
- apply and explain effective procedures for identifying and comprehending words in context; adjust procedures according to the purpose for reading and the complexity of the texts
- use reference materials, including a writer's handbook, to verify correct usage, answer uncertainties and solve problems that arise
- experience oral, print and other media texts from a variety of cultural traditions and genres
- consider historical context when developing own points of view or interpretations of oral, print and other media texts
- relate the themes, emotions and experiences portrayed in oral, print and other media texts to issues of personal interest or significance

©Alberta Learning, Alberta, Canada

- discuss how techniques, such as irony, symbolism, perspective and proportion, communicate meaning and enhance effect in oral, print and other media texts
- describe how theme, dominant impression and mood are developed and sustained through choices in language use and the interrelationship of plot, setting and character
- evaluate the effectiveness of different types of media texts for presenting ideas and information
- compare the development of character, plot and theme in two oral, print or other media texts
- identify ways that a change in narrator might affect the overall meaning of oral, print and other media texts
- generalize from own experience to create oral, print and other media texts on a theme
- create oral, print and other media texts that interrelate plot, setting and character, and reveal the significance of the action

◆ ***manage ideas and information***

- synthesize ideas and information from a variety of sources to develop own opinions, points of view and general impressions
- select types and sources of information to achieve an effective balance between researched information and own ideas
- obtain information reflecting multiple perspectives from a variety of sources, such as expository essays, graphs, diagrams, online catalogues, periodical indices, film libraries, electronic databases and the Internet, when conducting research
- evaluate sources for currency, reliability and possible bias of information for a particular research project
- use own words to summarize and record information in a variety of forms; paraphrase and/or quote relevant facts and opinions; reference sources
- select and record ideas and information that will support an opinion or point of view, appeal to the audience, and suit the tone and length of the chosen form of oral, print or other media text
- evaluate usefulness, relevance and completeness of gathered information; address information gaps
- communicate ideas and information in a variety of oral, print and other media texts, such as media scripts, multimedia presentations, panel discussions and articles
- reflect on the research process, identifying areas of strength and ways to improve further research activities

◆ ***enhance the clarity and artistry of communication***

- work collaboratively to make appropriate revisions based on feedback provided by peers
- revise to ensure effective introductions, consistent points of view, effective transitions between ideas and appropriate conclusions
- develop personal handwriting styles appropriate for a variety of purposes
- identify and experiment with some principles of design that enhance the presentation of texts

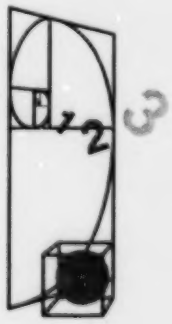
©Alberta Learning, Alberta, Canada

- use a variety of strategies to make effective transitions between sentences and paragraphs in own writing
- demonstrate the deliberate, conscientious and independent application of a variety of editing and proofreading strategies to confirm spellings in own writing
- know that rules for punctuation can vary, and adjust punctuation use for effect in own writing
- choose appropriate types of evidence and strategies to clarify ideas and information, and to convince various readers and audiences
- integrate a variety of media and display techniques, as appropriate, to enhance the appeal, accuracy and persuasiveness of presentations
- follow the train of thought, and evaluate the credibility of the presenter and the evidence provided

◆ ***respect, support and collaborate with others***

- examine how personal experiences, cultural traditions and Canadian perspectives are presented in oral, print and other media texts
- explore and experiment with various ways in which the language arts are used across cultures, age groups and genders to honour and celebrate people and events
- create or use oral, print and other media texts in ways that are respectful of people, opinions, communities and cultures
- discuss and choose ways to coordinate the abilities and interests of individual group members to achieve group goals
- share responsibility for the completion of team projects by establishing clear purpose and procedures for solving problems, monitoring progress and making modifications to meet stated objectives
- establish and use criteria to evaluate group process and personal contributions; set goals and make plans for improvement.

Mathematics



Mathematics is a common human activity, increasing in importance in a rapidly advancing, technological society. A greater proficiency in using mathematics increases the opportunities available to individuals. Students need to become mathematically literate in order to explore problem-solving situations.

At all levels, students benefit from working with appropriate materials, tools and contexts when constructing personal meaning about new mathematical ideas.

The main goals of mathematics education are to prepare students to:

- use mathematics confidently to solve problems
- communicate and reason mathematically
- appreciate and value mathematics
- commit themselves to lifelong learning
- become mathematically literate adults, using mathematics to contribute to society.

©Alberta Learning, Alberta, Canada

As students acquire the specified outcomes, they will also be expected to use the following seven mathematical processes:

Communication
Connections
Estimation and Mental Mathematics
Problem Solving
Reasoning
Technology
Visualization.

The mathematics content is organized into four strands:

Number
Patterns and Relations
Shape and Space
Statistics and Probability.

Number

By the end of Grade 9, students will:

- Explain and illustrate the structure and the interrelationship of the sets of numbers within the rational number system.

Sample Student Tasks

- The ratio of the circumference to the diameter of any circle is π. Explain whether or not π is a rational number.
- If you wanted to find the length of one side of a garden whose area is 25 m^2, explain why you would use only the positive square root of 25.

- Develop a number sense of powers with integral exponents and rational bases.

Sample Student Tasks

- Explain, orally and in written form, why $2^3 \times 2^5 = 2^8$. Give other examples of multiplication of powers with the same base. What is the pattern? Generalize to variable bases and exponents.
- Which is greater, 2^{-5} or 5^{-2}. Explain your reasoning. Compare your answer with your calculator answers.

- Use a scientific calculator or a computer to solve problems involving rational numbers.

Sample Student Tasks

- A swimming pool is filled by means of three pipes. The first pipe, by itself, can fill the pool in 8 hours; the second, by itself, can fill it in 12 hours; and the third pipe, by itself, can fill the pool in 24 hours. When all three pipes are in use at the same time, how long does it take to fill the pool?

- Explain how exponents can be used to bring meaning to large and small numbers, and use calculators or computers to perform calculations involving these numbers.

©Alberta Learning, Alberta, Canada

Sample Student Tasks

- The Moon is 3.84×10^5 km away. The circumference of the Earth at the equator is 4.0×10^4 km. How many times around the Earth, at the equator, would be the same as the distance to the Moon?

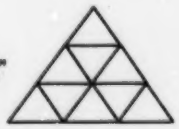
Patterns and Relations

By the end of Grade 9, students will:

◆ Generalize, design and justify mathematical procedures, using appropriate patterns, models and technology.

Sample Student Tasks

- This figure contains several "upright" triangles.



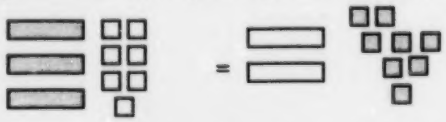
  Construct your own definition of an "upright" triangle.
  Using your definition, how many "upright" triangles are there in a similar figure with 10 rows?

- Given that density is mass divided by volume, explain why volume is mass divided by density.

◆ Solve and verify linear equations and inequalities in one variable.

Sample Student Tasks

- Use algebra tiles to justify an algebraic solution to $3x - 7 = -2x + 8$



- A string measuring 50 cm in length is cut into three pieces. One piece is twice as long as the shortest piece and the other piece is 10 cm longer than the shortest piece. Find the length of each piece of string.

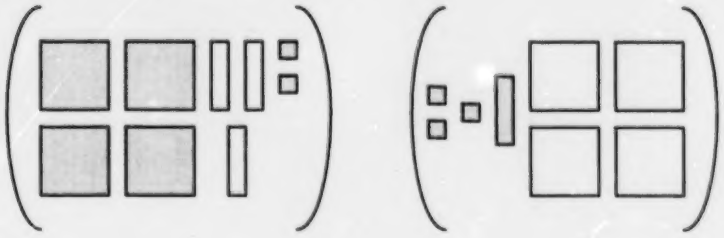
- Lillian received 77%, 69%, 81% and 76% on her mathematics tests. What mark does she need on her fifth test in order to achieve an arithmetic mean (average) of at least 80%?

◆ Generalize arithmetic operations from the set of rational numbers to the set of polynomials.

©Alberta Learning, Alberta, Canada

Sample Student Tasks

- Explain how the algebra tiles given below can be used to justify an algebraic process for simplifying: $(4x^2 - 3x + 2) - (3 + x - 4x^2)$.



- Use an area model with algebra tiles to explain your algebraic solution to the product $(4x + 1)(x + 2)$.
- Find the quotient: $\frac{12x^3 - 16x^2 + 8x}{4x}$.

Shape and Space

By the end of Grade 9, students will:

◆ Use trigonometric ratios to solve problems involving a right triangle.

Sample Student Tasks

- A 10-m ladder is leaning against a building. The angle between the ladder and the ground is 40°. The base of the ladder is 1.5 m from the building. How far is the top of the ladder from the ground?

◆ Describe the effects of dimension changes in related 2-dimensional shapes and 3-dimensional objects in solving problems involving area, perimeter, surface area and volume.

Sample Student Tasks

- Design three different containers that will hold 12 centimetre cubes and determine the most cost efficient container.

◆ Specify conditions under which triangles may be similar or congruent, and use these conditions to solve problems.

Sample Student Tasks

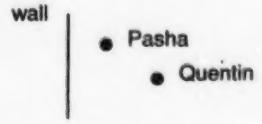
- Sol made a scale drawing of his rectangular vegetable garden, so he could plan how to plant it. Two sides of the garden are 10 m and 12 m and they form an angle of 50°. He drew a 50° angle on paper and made a triangle by marking off 20 cm and 24 cm on the sides of the angle and connecting them. He measured this side to be 19 cm. What is the length of the third side of this garden?

©Alberta Learning, Alberta, Canada

◆ Use spatial problem solving in building, describing and analyzing geometric shapes.

Sample Student Tasks

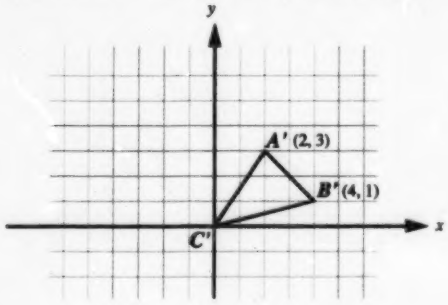
- Pasha and Quentin are hiding behind a high wall. Use diagrams to show:
  - points from which neither person can be seen
  - points from which Pasha but not Quentin can be seen
  - points from which both can be seen.



◆ Apply coordinate geometry and pattern recognition to predict the effects of translations, rotations, reflections and dilatations on 1-dimensional lines and 2-dimensional shapes.

Sample Student Tasks

- The triangle in the diagram was moved from its original position by adding 1 to its *x*-coordinates and 3 to its *y*-coordinates and then reflect over the *x*-axis. What was the original position of the triangle?



Statistics and Probability

By the end of Grade 9, students will:

◆ Collect and analyze experimental results expressed in two variables using technology, as required.

Sample Student Tasks

- Design, conduct and report on an investigation into one of the following:
  - spring extension versus mass
  - mass versus volume for several samples of the same substance
  - price in Canadian dollars versus price in US dollars for books and magazines
  - temperature versus time of day over a two-day period (nonlinear)
  - height versus "arm stretch"—distance between fingertips with arms fully extended
  - any other possible relationship you wish to investigate.

©Alberta Learning, Alberta, Canada

- ◆ Explain the use of probability and statistics in the solution of complex problems.

Sample Student Tasks

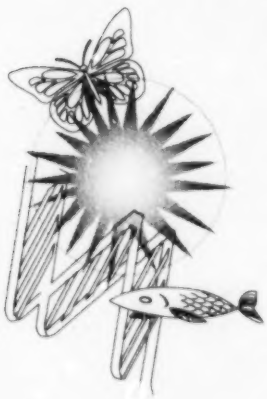
- Amenu chose three, single digits for her combination lock. What is the probability that someone could make a lucky guess and open her lock? Explain. How could you set up a simulation experiment, using the computer to solve this problem?

Parent Document

The booklet *Working Together in Mathematics Education* provides an overview of the new mathematics curriculum and shows some of the knowledge, skills and attitudes students are expected to learn. It presents some ways parents and others can support student learning in mathematics.

Working Together . . . is available for purchase from the Learning Resources Centre. This booklet is also available for viewing and downloading from the Alberta Learning web site.

Science



In science, students develop knowledge and skills that help them understand and interpret the world around them. At each level of the junior high program, students learn basic concepts from earth, physical and life sciences, and are challenged to apply what they have learned. Through their studies, students are expected to develop skills of inquiry and experimentation, skills of solving practical problems, and the skills of finding and evaluating information.

In a Catholic school, students are invited to consider how issues of stewardship, morals, ethics and Catholic teaching can be integrated appropriately into the science curriculum.

The Grade 9 science program consists of six units of study. Each unit focuses on a particular topic and develops three common themes:

- Nature of Science
- Science and Technology
- Science, Technology and Society.

The six units of study are:

- Diversity of Living Things
- Fluids and Pressure
- Heat Energy: Transfer and Conservation
- Electromagnetic Systems
- Chemical Properties and Changes
- Environmental Quality.

©Alberta Learning, Alberta, Canada

Diversity of Living Things

Students study the diversity of living things, using scientific observation and classification. It examines processes that can alter the diversity of living things through the development and extinction of species.

By the end of Grade 9, students are expected to:

- describe the diversity of living things, using examples of structural and behavioural adaptations
- describe how selective breeding allows for the development of desired characteristics in domestic plants and animals
- describe the concept of natural selection to explain the evolution and extinction of species
- identify individual organisms that belong to larger groups sharing similar characteristics
- identify similarities and differences of major groups of living things.

Fluids and Pressure

Students are introduced to the properties of fluids, and examine the applications of fluids within the natural world and technological devices.

By the end of Grade 9, students are expected to:

- describe properties of fluids (liquids and gases) that make them useful in technological devices
- explain how hydraulic systems are used to apply and transfer forces
- interpret various technologies used in the movement and control of fluids
- design a device, using the concepts of fluid movement.

Heat Energy: Transfer and Conservation

Students learn about heat energy, transfer and related applications.

By the end of Grade 9, students are expected to:

- explain and apply the Particle Theory in different situations
- identify and interpret heat transfer processes of conduction, convection and radiation
- explain the term heat as used to describe energy gained or lost by a material as it interacts with other material
- demonstrate that the materials and/or design of an object may affect the amount of heat gained or lost
- design and construct a solar heating device.

Electromagnetic Systems

Students study the principles of electrical current that provides a basis for production, control and use of electrical energy.

By the end of Grade 9, students are expected to:

- describe potentially dangerous situations involving electrical currents
- describe the various technologies used to produce electrical currents
- design and construct a simple device that operates on the basis of electromagnetic force
- construct and interpret circuit diagrams
- design and construct a circuit that will respond to a changing environmental condition.

©Alberta Learning, Alberta, Canada

Chemical Properties and Changes

Students are introduced to the chemical properties of common substances.

By the end of Grade 9, students are expected to:

- observe and measure properties of different materials
- describe changes in physical and chemical properties
- measure and describe the pH of substances
- distinguish and interpret physical and chemical properties of common household materials
- observe and measure different variables in chemical reactions
- evaluate methods of preventing oxidation (rusting) and corrosion in particular applications.

Environmental Quality

Students learn about the idea of environmental quality and the role of science in monitoring that quality.

By the end of Grade 9, students are expected to:

- describe changes in the ability of environments to support life
- identify quality indicators of different environments
- describe procedures used to measure environmental pollutants
- use scientific knowledge to make informed decisions about the environment
- identify personal actions that effect environmental quality.

Social Studies

Social studies helps students to learn basic knowledge, skills and attitudes needed to become responsible citizens and contributing members of society. Social studies includes the study of history, geography, economics, the behavioural sciences and humanities. Grade 9 social studies focuses on different perspectives of economic growth. The content is organized around three topics that serve as the context for developing important skills and attitudes. In each topic, students are expected to address at least one issue and one question for inquiry. Suggestions for this inquiry are provided within the curriculum.

In a Catholic school, students are invited to consider how issues of social justice, the contribution of the Church to community (locally and globally), and Church teaching can be integrated appropriately into the social studies curriculum.

Three topics are identified for Grade 9.

©Alberta Learning, Alberta, Canada

Economic Growth: United States of America

Students learn how economic growth within a market economy affects the quality of life. Students will study the growth of industrialization in the United States.

By the end of Grade 9, students are expected to:

- describe some important influences upon industrialization in the United States
- explain how the changes in technology have influenced work, production and quality of life
- explain the role labour, government and specific individuals have played in the economic growth of the United States
- evaluate the effect of a market economy on the individual
- identify relationships among variables in charts, graphs and tables
- identify points of view expressed in cartoons, pictures and photographs
- appreciate the need for a balance between freedom and responsibility
- have empathy for people who have been affected by change.

Economic Growth: A Case Study of the Former U.S.S.R.

Students learn how economic growth in a centrally planned economy has affected the quality of life. Students will learn about the growth of industrialization in the former Soviet Union.

By the end of Grade 9, students are expected to:

- describe how geography and history have influenced the industrial development of the former Soviet Union
- explain the role that government and significant individuals have had in developing the economy of the former Soviet Union
- evaluate the effect of a centrally planned economy on the individual
- read and interpret maps to uncover relationships between geography and industrialization
- draw conclusions about economic growth within a centrally planned economy
- appreciate the worth of individual initiative and group effort in achieving goals
- appreciate the ways different economic systems meet the needs of people.

Canada: Responding to Change

Students learn about technological change and its effect on the quality of life within a mixed economy so that they can make informed choices about economic growth. Students will study economic growth and technological change in the Canadian context.

By the end of Grade 9, students are expected to:

- discuss how technology affects our quality of life, the way people work and the world of work
- explain ways that government and individuals can influence technological change
- determine and express an opinion on the extent governments should influence economic growth

©Alberta Learning, Alberta, Canada

- determine the role of labour and management in responding to technological change
- evaluate the effect of continued economic growth on the physical and social environments
- read and interpret maps to uncover relationships between geography and industrialization in Canada
- classify industries as primary, secondary and tertiary, by using a colour scheme and corresponding key
- identify, understand and discuss issues of significance to the future of Canada and themselves
- develop awareness that technology raises many ethical issues.

Physical Education

The physical education program emphasizes active living, with a focus on physical activity that is valued and integrated into daily life.

The aim of the K–12 physical education program is to enable individuals to develop the knowledge, skills and attitudes necessary to lead an active, healthy lifestyle.

Four general outcomes form the basis of the K–12 curriculum. These are interrelated and interdependent. Each is to be achieved through participation in a variety of physical activities from the five dimensions outlined in general outcome A.

Each general outcome includes specific outcomes by grade, or by course name at the senior high school level. Specific outcomes for Grade 9 physical education follow.

Within Catholic schools, some of the values integrated into the Physical Education program include recognizing the dignity of each person as evident in their unique gifts and talents, community building, cooperation and shared responsibility, respect and care for the body.

By the end of Grade 9, students will:

General Outcome A

- acquire skills through a variety of developmentally appropriate movement activities; dance, games, types of gymnastics, individual activities and activities in an alternative environment; e.g., aquatics and outdoor pursuits.

Basic Skills

- apply and refine locomotor skills and concepts to a variety of activities with increased control to improve personal performance
- apply and refine locomotor skills by using elements of body and space awareness, effort and relationships, to improve personal performance
- apply and refine nonlocomotor skills and concepts to a variety of activities with increased control to improve personal performance
- apply and refine nonlocomotor skills using elements of body and space awareness, effort and relationships, to improve personal performance

©Alberta Learning, Alberta, Canada

- apply and refine ways to receive, retain and send an object with increased speed, accuracy and distance in skills specific to an activity
- apply and refine manipulative skills by using elements of space awareness, effort and relationships, with and without objects, to improve performance

Application of Basic Skills
- apply and refine activity-specific skills in a variety of environments; e.g., hiking, wall climbing
- create, refine and present a variety of dance sequences; e.g., jazz, square, social and novelty, alone and with others
- choreograph and perform dance sequences, using the elements of movement and basic dance steps and patterns
- apply and refine activity-specific basic skills in a variety of games
- create and plan activities that emphasize specific strategies and tactics that coordinate effort with others; e.g., team/fair play, in order to achieve a common activity goal
- apply and refine ways to improve the functional and expressive qualities of movements, that combine basic skills in a variety of gymnastic experiences individually, with a partner, or in a group; e.g., educational, rhythmic and artistic
- apply and refine activity-specific skills in a variety of individual pursuits; e.g., fitness activities

By the end of Grade 9, students will:

General Outcome B

- understand, experience and appreciate the health benefits that result from physical activity.

Functional Fitness
- design, monitor and personally analyze nutrition programs that will affect physical performance
- demonstrate, monitor and analyze ways to achieve a personal functional level of physical fitness
- design and implement a personal fitness and activity plan, using the principles of training: frequency intensity, duration

Body Image
- acknowledge and analyze the media and peer influences on body image
- discuss the effects of performance-enhancing substances on body type and body image as a part of physical activity

Well-being
- analyze and explain the effects that nutrition, fitness and physical activity have on body systems before, during and after exercise
- monitor, analyze and assess fitness changes as a result of physical activity
- select and perform appropriate physical activities for personal stress management and relaxation

©Alberta Learning, Alberta, Canada

By the end of Grade 9, students will:

General Outcome C

◆ interact positively with others.

Communication
- communicate thoughts and feelings in an appropriate respectful manner as they relate to participation in physical activity
- identify and discuss the positive behaviours that are demonstrated by active living role models

Fair Play
- demonstrate etiquette and fair play

Leadership
- describe, apply, monitor and practise leadership and followership skills related to physical activity

Teamwork
- develop practices that contribute to teamwork
- identify and demonstrate positive behaviours that show respect for self and others

By the end of Grade 9, students will:

General Outcome D

◆ assume responsibility to lead an active way of life.

Effort
- participate regularly in, and realize the benefits of, an active lifestyle
- develop a personal plan that encourages participation and continued motivation

Safety
- select and apply rules, routines and procedures for safety in a variety of activities from all movement dimensions
- analyze, design and perform warm-up and cool-down activities
- design safe movement experiences that promote an active, healthy lifestyle; e.g., student created games

Goal Setting/Personal Challenge
- determine and articulate challenging personal and team goals based on interests and abilities
- evaluate different ways to achieve an activity goal, and determine personal and team approaches that are challenging for both the individual and the group

Active Living in the Community
- evaluate community programs that promote physically active lifestyles and how they meet local needs
- develop strategies to counteract influences that limit involvement in physical activity

©Alberta Learning, Alberta, Canada

Consideration for exemptions from participation in physical education is given for medical conditions, when accompanied by medical certification from a doctor to the principal; for religious beliefs, when accompanied by a statement in writing from a parent to the principal and where access to facilities is prohibitive. When exemption is granted, activities consistent with the program outcomes should be substituted where appropriate.

Health and Personal Life Skills

Each person begins life with unique characteristics, capabilities, limitations and the potential to grow as a person. A health program that encompasses the multidimensional nature of the person helps students recognize their potential and become aware of alternatives that will enhance their personal lifestyle.

The Health and Personal Life Skills program encourages the involvement of community agencies. To promote accurate information exchange and to encourage ongoing health education, it is important to involve parents and community resource people in the health program. Health education is a responsibility shared with the home, school and community.

The Health and Personal Life Skills curriculum is arranged around themes. While the themes are repeated throughout the junior high program, the focus and content is different in each grade.

In a Catholic school, these themes are taught within the context of the teachings of the Catholic Church. The local boards of many Catholic school districts have approved supplementary resources and adapted the curriculum to better meet the needs of their students, their families and their faith communities.

Self-awareness and Acceptance

Students are provided the opportunity to develop attitudes of self-awareness and acceptance.

By the end of Grade 9, students are expected to:

- describe the relationship of self-concept and achievement
- describe the concepts of interdependence and personal responsibility
- identify different feelings and how they are expressed
- describe the relationship between emotional and physical health.

Relating to Others

Students learn that interpersonal relationship skills help individuals make decisions about behaviour that allows them to feel good about themselves and function positively within their environment.

By the end of Grade 9, students are expected to:

- describe the concept of rights and responsibility within relationships
- explain how family members influence the lives of each other
- interpret the family life cycle theory.

©Alberta Learning, Alberta, Canada

Life Careers

Students consider their personal interests, aptitudes and abilities in relation to career awareness and personal career planning.

By the end of Grade 9, students are expected to:

- use occupational classifications
- investigate different occupations and their educational requirements
- discuss the changing roles of men and women and the effect of stereotyping
- develop a personal career plan
- develop profile of personal strengths and uniqueness.

Body Knowledge and Care

Students acquire the knowledge and skills to help them make effective decisions and to care for their body.

By the end of Grade 9, students are expected to:

- describe the importance of a balanced fitness program to promote health throughout life
- select and use health care products and services responsibly.

Human Sexuality

This theme emphasizes the individual nature of change, growth and the importance of one's family and personal values with respect to sexuality and sexual decision making. This unit is addressed within the context of Catholic teaching.

By the end of Grade 9, students are expected to:

- understand how personal and family values influence sexual decision making
- understand the advantages of abstinence
- understand the nature and process of puberty
- understand the relationship between good health and pregnancy
- understand the advantages and disadvantages of different birth control methods, including abstinence, and the moral position of the Catholic Church on each method.

Alberta Learning requires that all schools offer the Human Sexuality theme of the Health and Personal Life Skills program. Parents will be notified when this theme will be offered. Parents decide if their child will participate in the human sexuality component.

©Alberta Learning, Alberta, Canada

Information and Communication Technology (ICT)

The ICT curriculum provides a broad perspective on the nature of technology, how to use and apply a variety of technologies, and the impact of ICT on self and society. Students in Kindergarten through Grade 12 will be encouraged to grapple with the complexities, as well as the advantages and disadvantages, of technologies in our lives and workplaces.

Technology is about the way things are done; the processes, tools and techniques that alter human activity. ICT is about the new ways in which we can communicate, inquire, make decisions, manage information and solve problems.

The ICT curriculum is not intended to stand alone as a course, but rather to become a part of core courses and programs.

The ICT curriculum will be implemented in all schools in Alberta over a three-year period, starting September 2000 through to June 2003.

General and Specific Outcomes

General outcomes for the ICT curriculum are statements that identify what students are expected to know and be able to do and value by the end of grades 1–3, 4–6, 7–9 and 10–12. There is a progressive sequence of skill development throughout the grades. Specific outcomes expand on the general outcomes and state in more detail what students are expected to learn. ICT outcomes are organized into three main categories, as shown in the charts below. For each category, all the general outcomes themselves also are listed.

Communicating, Inquiring, Decision Making and Problem Solving	
C1	Students will access, use and communicate information from a variety of technologies.
C2	Students will seek alternative viewpoints, using information technologies.
C3	Students will critically assess information accessed through the use of a variety of technologies.
C4	Students will use organizational processes and tools to manage inquiry.
C5	Students will use technology to aid collaboration during inquiry.
C6	Students will use technology to investigate and/or solve problems.
C7	Students will use electronic research techniques to construct personal knowledge and meaning.

©Alberta Learning, Alberta, Canada

Foundational Operations, Knowledge and Concepts	Processes for Productivity
F1 Students will demonstrate an understanding of the nature of technology.	P1 Students will compose, revise and edit text.
F2 Students will understand the role of technology as it applies to self, work and society.	P2 Students will organize and manipulate data.
F3 Students will demonstrate a moral and ethical approach to the use of technology.	P3 Students will communicate through multimedia.
F4 Students will become discerning consumers of mass media and electronic information.	P4 Students will integrate various applications.
F5 Students will practise the concepts of ergonomics and safety when using technology.	P5 Students will navigate and create hyperlinked resources.
F6 Students will demonstrate a basic understanding of the operating skills required in a variety of technologies.	P6 Students will use communication technology to interact with others.

Examples of Specific Outcomes

By the end of Grade 9, students are expected to:

- communicate in a pervasive and engaging manner, through appropriate forms, such as speeches, letters, reports and multimedia presentations, applying information technologies for content, audience and purpose
- evaluate the authority and reliability of electronic sources
- pose and test solutions to problems by using computer applications, such as computer-assisted design or simulation/modelling software.

The ICT curriculum, along with support documents, can be found on the Alberta Learning web site.

Integrated Occupational Program

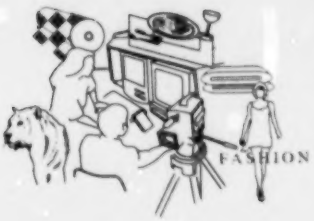
The Integrated Occupational Program (IOP) is a program of choice available in selected schools. The program begins in Grade 8, although students may also enter in grades 9, 10 or 11, and continues through Grade 12. IOP is designed for students who require an integrated program that enhances their academic and occupational competencies and their abilities to enter into employment and/or post-secondary training directly from high school. Upon successful completion of the IOP, students earn a Certificate of Achievement.

©Alberta Learning, Alberta, Canada

IOP is designed for students whose learning styles, abilities and needs are best met through an integrated, real-life approach to teaching and learning. The courses provide functional and practical, hands-on learning experiences. IOP students demonstrate reading, writing, computational and other levels of achievement below those of their age peers, which tends to make it difficult for them to experience success in a diploma program.

Note: The Integrated Occupational Program is currently being revised.

Optional Courses



In addition to required courses, junior high schools are required to offer two provincially authorized optional courses. Optional courses are offered in the areas of career and technology studies, environmental and outdoor education, fine and performing arts, religious or ethical studies, and languages other than English. The range of optional courses offered varies from school to school dependent on such factors as student and parent preferences, facilities and staffing. Optional courses are designed to reinforce the learning in required courses, and to provide opportunities for students to explore areas of interest and areas related to potential careers.

Career and Technology Studies

Career and Technology Studies (CTS) provides students with practical, hands-on learning experiences in the area of personal interest, general career exploration and applied technology. In CTS, students have the opportunity to use and apply technology effectively and efficiently to solve problems and produce usable products within a personally relevant career context.

The Career and Technology Studies program is organized into strands and courses. Schools select from 22 strands those courses that are most relevant for the students and the community. A strand is a group of courses that support a wide range of career and occupational opportunities within one particular category. A course defines what students should know and be able to do and, in general, takes about 25 hours to complete, although some students may need less or more time. Students progress through a sequence of courses completing more challenging projects and activities as they go. In senior high school, students can build on what they learned in junior high school, developing career-specific skills that will help them make a smooth transition into adult roles in the family, community, workplace or further education.

The 22 Career and Technology Studies program strands are:

- Agriculture
- Career Transitions
- Communication Technology
- Community Health
- Construction Technologies
- Cosmetology Studies
- Design Studies
- Electro-Technologies
- Energy and Mines
- Enterprise and Innovation
- Fabrication Studies
- Fashion Studies
- Financial Management
- Foods
- Forestry
- Information Processing
- Legal Studies
- Logistics
- Management and Marketing
- Mechanics
- Tourism Studies
- Wildlife

©Alberta Learning, Alberta, Canada

The CTS program offered in each school will vary depending on student and parent wishes, staff and facilities. Parents are encouraged to visit their local school to determine which CTS courses are being offered.

Students in Career and Technology Studies are expected to:

- develop skills that they can apply in their daily lives now and in the future
- refine career planning skills
- develop technology-related skills
- enhance employability skills
- apply and reinforce learnings developed in other subject areas.

Fine and Performing Arts

In a Catholic school, students are invited to consider how the knowledge, skills and values studied within the fine arts curriculum can be used to understand the religious dimensions of art, liturgy, music and history. They are also used directly to enhance the religious and spiritual culture of the school, and to celebrate the various liturgical feasts of the year.

Art

In art, students are expected to learn how to express their personal feelings and intuitions and to become art critics. To achieve this, students are expected to use traditional and contemporary tools, materials and media, to think like artists, to value the art creation, and to value the art form. The expectations for art are the same for students in grades 7, 8 and 9. Students are expected to demonstrate increased levels of performance during the three years in junior high school.

Three areas—drawings, compositions and encounters—provide the framework for the junior high art program.

By using a variety of materials and techniques, students are expected to:

- depict the visual world through drawing, painting and sculpting
- increase technical competencies in drawing, painting and sculpting
- develop competencies in composition and use of multiple media
- develop a vocabulary for critiquing their art work in a positive way
- use the proper vocabulary of art criticism
- investigate natural forms and man-made structures as source subjects
- compare natural and man-made artifacts
- understand the impact of artistic expression on cultures and across cultures.

Drama

Drama encourages students to explore a variety of dramatic roles and develop a range of dramatic skills. Students set up a dramatic situation, act out the situation and reflect on the consequences. It is this reflection that provides the knowledge for self-development and improved performance. Through the five disciplines in the junior high drama program, students learn about the different forms and standards of drama and theatre.

©Alberta Learning, Alberta, Canada

The five disciplines are:

movement	– physical, nonverbal expression
speech	– exploration of talking and speaking to effectively communicate ideas
improvisation/acting	– acting out of an idea or situation
theatre studies	– an introduction to the elements of drama and theatre
technical theatre	– stage construction and the use of sound, lighting, makeup, costumes, sets and props.

Music

Instrumental music, choral music and general music are the three distinctive, yet related, programs in the junior high music curriculum. Development in any of these programs requires student involvement as a performer, listener and composer.

The **instrumental** music program is designed to be a sequential and developmental approach to music instruction in either a wind percussion program or strings program.

The **choral** music program provides opportunities for students to develop and increase musical competency through singing, listening, creating and reading music.

The **general** music program covers a wide variety of musical areas from composition to performance, history and the basics of music.

The five main goals of junior high music are to enable students to:

- develop skills in listening, performing and reading music
- strive for musical excellence
- understand, evaluate and appreciate a variety of music styles
- develop self-expression, creativity and communication through music
- increase their awareness of the history of music and the role of music in their lives.

Language Programs and Courses Other Than English

In addition to studying the English language arts, students registered in an immersion or a bilingual program follow a language arts course in the target language; e.g., French, Ukrainian. In these programs, this target language is also used as the language of instruction in other subject areas, such as mathematics, science, social studies.

French Immersion

In Alberta, many students have the opportunity to study in a French immersion program. This program, designed for non-French speaking students, offers students an effective way to become functionally fluent in French while achieving all of the learning outcomes of the regular program of studies. Graduates from French immersion programs achieve a level of fluency in the target language that allows them to pursue their post-secondary studies in French or to accept employment in a workplace where French is the main language of communication.

©Alberta Learning, Alberta, Canada

Although there are many delivery models present in Alberta schools, the most common model offered is referred to as early immersion. In this delivery model, students begin their immersion experience in Kindergarten and continue on in the program to Grade 12. There are also French immersion programs with other entry points; the most popular of these being late immersion, where the entry point is typically in Grade 7. As can be expected, the French language proficiency achieved by students is in large part determined by the exposure to the target language. Regardless of the model (early or late French immersion), students in these programs generally achieve excellent results on Alberta's achievement and diploma testing programs, including English Language Arts. Learning the French language is an integral part of the immersion experience and must take place in all subject areas taught in French.

Any course, for example, mathematics, science, social studies, offered in the French language has as its basis a French version of the English program of studies. It is identical or comparable, except for Grade 1 to Grade 3 social studies, to the one used in the English program. However, a program of studies specific to French immersion students was developed for the learning/teaching of French Language Arts. Some of the main French Language Arts learning outcomes are presented below.

French Language Arts

At the junior high school level, the French Language Arts program of studies is intended to continue the work started at the elementary level, including vocabulary and syntax enrichment, to enable students to engage more actively and effectively in proposed activities. Students gradually become aware of elements that ensure message clarity, such as exact, precise expressions and words, and correct, increasingly complex sentences. They learn to respect the basic rules of language in the oral exchanges that take place in the classroom as well as in their writing projects. The acquisition of a solid language basis allows the students to better understand, clarify and express abstract thought. The program of studies also targets the development of students' ability to plan and monitor their communication projects, whether they are working individually, with classroom partners, or participating in activities organized by the francophone community. Students become more aware of factors that influence the way they communicate effectively in various contexts.

In **oral comprehension**, students learn to pay particular attention to the organization of a message (text structure and genre) and to their knowledge about the author, producer or broadcast to guide them in their listening. They learn to question their attitudes toward the task and the means they use to overcome difficulties.

In **reading comprehension**, students develop their reading ability by analyzing the task at hand and choosing the best way to tackle more complex passages. They improve their ability to analyze text characteristics for a better understanding of the internal organization (text structure and genre) and the author's intent.

©Alberta Learning, Alberta, Canada

In **oral production**, students learn the vocabulary and syntax that will enable them to express themselves in various contexts. They develop the ability to plan group projects and to interact effectively with their peers.

In **writing**, students gradually learn to develop a work plan that will enable them to complete their writing projects more efficiently. They learn to organize and express their ideas clearly, while respecting the rules of internal text organization as well as those of grammatical spelling. They also learn to edit their texts using various reference materials.

Note: The development of basic language skills does not take place in isolated exercises, but rather in context, so that students learn not only the rules but also when and how to apply them.

In Grade 9, learning occurs primarily through:

- group work situations
- reading to students of texts in various subject areas
- reading to students of newspaper and magazine articles, short stories, or excerpts from plays or novels
- listening to audio texts, such as songs
- viewing audiovisual materials.

Students will learn to gather information from the broadcaster to focus their listening, note points on which they wish clarification and tolerate ambiguity.

Teachers will select, for their students, texts:

- from the field of information and opinion; e.g., news items, documentaries, letters or texts presenting a point of view
- from the imaginary world; e.g., narratives, poems, songs, short stories, etc.

With respect to the development of reading strategies, students learn to tackle a text by taking into account its organization (e.g., descriptive) and developing various ways of annotating a text.

The proposed situations should allow students to demonstrate what they already know, what they have learned about a given subject, or to express their opinions based on examples from their readings and discussions, and so on. The topics chosen for the presentations may be from another subject area of study. Students should have the opportunity to explore topic-related vocabulary in various contexts. In addition to group work situations, Grade 9 students develop their ability to read with expression.

The presentations and discussions should be well structured, with emphasis on the:

- use of expressions or words to describe events and personal experiences
- use of appropriate verb tenses to express past, present and future experiences when these are described in the same presentation
- correct use of possessive and demonstrative pronouns.

©Alberta Learning, Alberta, Canada

Emphasis on *discussion* enables students to continue developing their ability to interact with peers. Students are required to agree on the operational rules of the group as well as on their roles and responsibilities with respect to the task.

Students learn to write texts and pay particular attention to the way they express their feelings and opinions. They also learn to write short stories in which the images created evoke sentiments or emotions.

The main purpose of these activities is to enable students to integrate basic elements of the written language:

- selection of a text structure consistent with their communicative intent
- organization of ideas according to a plan; e.g., introduction, development and conclusion
- recognition and correction of semantic anglicisms
- agreement of past participles with the auxiliary verb *avoir* in the usual instances
- verb agreement when the subject includes nouns and pronouns in different persons
- punctuation
- spelling.

Should this program be of interest to you, contact your school jurisdiction to explore local program offerings. Information is also available from the French Language Services Branch and from Canadian Parents for French (CPF) at 403–262–5187, Calgary.

French as a Second Language

In Alberta, French as a Second Language (FSL) is a program in which the French language is taught as a subject, often between 20 and 40 minutes a day, to help students develop communication skills, language knowledge and cultural awareness in French.

Depending upon a school board's language policy, French as a Second Language in junior high schools may be offered as an optional program or it may be a compulsory program. School boards may begin the program at different grade levels, since the program is based on developing language proficiency over a grade or grades without being grade specific. Many schools start the elementary program in Grade 4, but others may not begin until Grade 7 or later.

The program is designed to teach students how to understand what they hear and read in French, and to communicate their ideas orally and in written form, using an approach that is based on real-life experiences and situations. Students will also acquire knowledge about local, provincial and national francophone groups to become more aware of their presence and to understand them better. Students learn French language vocabulary and grammar through thematic activities and projects that are related to real-life language experiences. At the same time, students are taught specific language learning strategies that will help them become better second language learners.

©Alberta Learning, Alberta, Canada

The program is organized into three language proficiency levels—Beginning, Intermediate and Advanced. Each of these proficiency levels is then further divided into three sublevels. In junior high schools, students start at the Beginning Level and progress through the Beginning 1, Beginning 2 and Beginning 3 sublevels depending on the time allocated to the program. It could take students one or more school years to reach a particular language proficiency level, depending upon when the students start the program and how much time is given to French instruction in the school.

Students entering junior high school may either begin their French language experience or they can continue developing their language proficiency, depending upon the level that was attained in elementary school.

For those starting French in junior high, the language content is based upon the concrete experiences of junior high students. These experiences provide a real-life context for understanding ideas in French and for communicating similar ideas. Each level has its own set of experiences that fall into the following areas:

Beginning 1
- School
- People Around Us
- Weather
- Animals
- Holidays and Celebrations

Beginning 2
- Community
- Clothing
- Exercise
- Food
- Housing

Beginning 3
- Activities
- Vacations
- Fine Arts
- Trades and Professions
- Hygiene and Safety

As students work through these experiences, they develop their ability to understand and communicate in French. At the end of each level, the students must demonstrate that they possess the following knowledge and language skills:

Beginning 1

The ability to understand simple ideas contained in listening and reading texts, such as the temperature in a weather forecast.

The ability to communicate concrete ideas, using simple sentences to identify, list or describe people, places or things, and to ask simple questions orally and in writing. For example, students could name their family members, give their ages and birthdays and describe them physically.

Beginning 2

The ability to understand simple ideas contained in listening and reading texts, such as understanding directions to the corner store or the main food items on a menu.

The ability to communicate concrete ideas, using simple sentences to identify, list or describe people, places or things, and to ask simple questions orally and in writing. For example, students could provide their address, telephone number and order pizza over the telephone. They could also write a simple note to describe their house to a pen pal.

Beginning 3

The ability to understand simple ideas contained in listening texts, such as a recorded message of flight departure times, and to understand simple reading texts, such as the safety rules on a safety week poster.

The ability to communicate concrete ideas, using a number of simple sentences to identify, list or describe people, places or things, ask simple questions, give information and simple advice orally and in writing. For example, students could telephone a travel agency to ask for prices for different travel destinations. They could also write an announcement for the school's Night of Music concert to promote it in the community.

©Alberta Learning, Alberta, Canada

If students have attained the Beginning Level 3 language proficiency, they move into the next proficiency level, which is Intermediate Level 4.

At the Intermediate level, the following set of language experiences are developed:

Intermediate 4	Intermediate 5	Intermediate 6
– Health and Exercise – Holidays and Celebrations – Clubs and Associations – Shopping – Senses and Feelings	– Close Friends – Fashion – Social Life – Outdoor Activities – Advertising	– World of Work – Trips, Excursions or Student Exchanges – Money – Role of the Media – Conservation and the Environment

At each of these levels, the students work through these experiences to continue developing their ability to understand and communicate in French.

At the end of each level, the students must demonstrate the following knowledge and skills:

Intermediate 4	Intermediate 5	Intermediate 6
The ability to understand main ideas and some details contained in listening and reading texts that are familiar and somewhat predictable, such as understanding some key ideas given in a radio program concerning someone's feelings, or understanding the main ideas and some details contained in a consumer's be aware brochures in order to provide shopping advice to a classmate.	The ability to understand main ideas and most details contained in listening and reading texts that are familiar and somewhat predictable, such as understanding almost all of the key ideas and most details presented in a fashion show, or understanding all the main ideas and most of the details contained in an article discussing survival techniques.	The ability to understand all main ideas and almost all of the details contained in listening and reading texts that are somewhat familiar but less predictable, such as understanding almost all of the key ideas and most details presented in a televised program on how to be successful in a job interview, or understanding all the main ideas and most of the details contained in an article discussing an environmental disaster.
The ability to talk and write about concrete topics, using simple and complex sentences, to compare or describe people, places or things, or to give or ask for information or advice. For example, students could talk about their club on a radio talk show and invite people to join, or they could write about what they are feeling in a journal entry.	The ability to talk and write about concrete topics, using simple and complex sentences, to compare or describe people, places or things, to give or ask for information or advice, or to narrate events in the past. For example, students could talk about their friends and what friendship means to them, or they could write a letter to a francophone pen pal describing a conflict they may have had with a friend.	The ability to talk and write about concrete but sometimes abstract topics, using a series of simple and complex sentences, to compare or describe people, places or things, to give or ask for information or advice, or to narrate events in any tense. For example, students could simulate carrying out a job interview or they could write a formal letter to a company comparing its environmental practices with that of another company.

©Alberta Learning, Alberta, Canada

If students have attained the Intermediate 6 language proficiency level, they move into the Advanced Level 7 in senior high school.

Parent Document

The booklet *French as a Second Language (FSL) Program: A Guide for Parents* provides an overview of the Alberta FSL program. You may find this booklet particularly useful if you are considering FSL for a young child, helping an older child choose courses, or looking for ways to support your child in the FSL program. The booklet is available for purchase from the Learning Resources Centre and is also available for viewing and downloading from the Alberta Learning web site.

German as a Second Language

This is a two-year, German second language program for junior high school students and is designed to develop effective communication skills in German, as well as develop cultural awareness. It can be taken in Grade 7 and Grade 8, or in Grade 8 and Grade 9.

Upon completion of the program, students are expected to:

- demonstrate their understanding of familiar questions, statements and instructions
- speak with reasonably correct intonation, rhythm and pronunciation
- reply with an appropriate answer to commonly asked questions and simple questions
- participate in a simple conversation directed by the teacher
- read for specific information and ideas within the range of their personal learning experiences and interests
- write familiar German, by:
  - copying
  - writing phrases from memory and dictation
  - composing simple statements and questions
  - answering questions in a controlled or guided context
- demonstrate awareness of the cultural implications of certain common linguistic forms.

Native Languages

Blackfoot and Cree language and culture programs are designed to enable students to learn Native languages and to increase awareness of Native cultures.

Students are expected to:

- learn basic communication skills in Blackfoot or Cree
- develop cultural sensitivity and enhance personal development
- develop originality and creativity
- develop a desire to improve their competency in Blackfoot or Cree.

©Alberta Learning, Alberta, Canada

Ukrainian Language Arts

Ukrainian Language Arts is offered as part of the Ukrainian bilingual program and is designed for native speakers of Ukrainian and for students who speak other languages and wish to learn Ukrainian. The bilingual program begins in Kindergarten and goes through to Grade 12.

Students are expected to:

- obtain specific information from teacher-selected sources
- recognize how to express personal feelings, ideas and opinions
- organize and present, effectively, information of interest to their peers
- share feelings; share and support ideas and opinions
- respond personally to a variety of literary forms
- use literature and other art forms to reflect creatively upon experiences of general interest
- recognize and be sensitive to differences or similarities in cultures
- recognize the contribution of the lifestyle of Ukrainians to the wider community.

Ukrainian as a Second Language, Six-year Program

The Ukrainian as a Second Language, six-year program, is designed for students who wish to learn to communicate with others in Ukrainian and to preserve Ukrainian language and culture. The program begins in Grade 7 and goes through to Grade 12.

Students are expected to:

- use appropriate social conventions
- ask and tell who someone is, someone's name, what something is
- carry out commands
- express actions in the negative
- ask and tell where people and objects are located, where one lives, simple directions
- ask and tell what one wants to do or needs to do
- count from 1 to 100 and recognize, orally, the ordinal numbers 1 to 10
- ask and tell the parts of the day, days of the week, seasons of the year.

In a Catholic school, both within the Religious Education Program and along with the study of the Ukrainian language, many aspects of the life and faith of the Ukrainian Catholic Church are studied and celebrated.

Other Languages

Locally developed language courses are available for Arabic, German, Italian, Japanese, Mandarin, Polish and Spanish. Contact your school board office for information about which language programs it offers.

©Alberta Learning, Alberta, Canada

Other

Environmental and Outdoor Education

In environmental and outdoor education, students develop interest and competence in outdoor studies and develop an understanding of their relationship to the environment. The course can be offered as a single course or as a sequence of courses.

Following completion of the course(s), students are expected to demonstrate:

- the basic knowledge, skills and attitudes required for safe and comfortable experiences
- understanding, respect and appreciation for themselves and others
- awareness and appreciation of living things
- understanding of basic ecological processes
- skill, judgement, confidence and sensitivity in a range of environmentally responsible activities in outdoor settings
- the ability to investigate the effects of human lifestyles on environment
- lifestyle strategies that encourage responsibility for local and global environments.

Ethics

The ethics course is designed to help students become contributing, ethical and mature persons. The aim of the course is to help students become more thoughtful, to think of the interests of others, and to see ethical implications in their daily lives.

Students are expected to learn:

- working definitions of ethics and values
- decision-making skills
- about historical values and traditions
- about values of different cultural groups
- about their responsibility to their community.

Modules include:

- Winning and Losing
- Fairness and the Law
- Religion and Values
- Messages in Media.

Locally Developed Courses

School boards may develop courses to be innovative and responsive to local and individual needs. Contact the school to learn about locally developed courses available in your jurisdiction.

©Alberta Learning, Alberta, Canada